

# Work Order ID 75329

October-20-11 2:57:08 PM

**\*75329\***

Page 1

Item ID: D2724-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: 206L Step Assembly  
 Start Date: 20/10/2011 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 02/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: M.L.J Date: 11/10/20 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2724	Rev C								

100 0.00  
**\*100\*** Large Fab  
 Large Fab Memo 0.00  
 Large Fab Cut D2724-1 using D2622 extrusion as per Dwg D2724  
 Deburr and bevel ends for welding

*11.10.27* 4 *φ*

110 0.00  
**\*110\*** Large Fab  
 Large Fab Memo 0.00  
 Large Fab Weld end cap and lugs as per Dwg D2724 using Jig DT8884 followed by  
 Jig (One End Only)  
 DT A/R AL ROD Batch: 114514  
 Grind end cap welds flush 118735

*11.10.27* 4 *φ*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75329

October-20-11 2:57:09 PM

**\*75329\***

Page 2

Item ID: D2724-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: 206L Step Assembly  
 Start Date: 20/10/2011 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 02/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
<b>*120*</b>						4	0	BE 11/10/28	
QC	Memo	0.00							
Quality Control									
130	QC5- Inspect part completeness to step on W/O	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							
<b>*140*</b>									
HandFinish	Memo	0.00							
Hand Finishing									

Handwritten notes and stamps:  
 - 4X 0 M/L 11/11/02  
 - LH  
 - 4H  
 - 44

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 75329**

October-20-11 2:57:09 PM

**\*75329\***

Page 3

Item ID: D2724-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: 206L Step Assembly  
Start Date: 20/10/2011 Start Qty: 4.00 **\*4\*** Cust Item ID:  
Required Date: 02/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 <b>*150*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00		11.11.02		4	0		
160 <b>*160*</b> Large Fab Large Fab	Large Fab  Memo Inspect for foreign object per QSI 024 Weld Remainig end cap as per Dwg D2724 using Jig DT8884 followed by Jig DT A/R AL ROD Batch: <u>M114514</u> Grind per dwg D2724	0.00  0.00		11.11.04		4	0		
170 <b>*170*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds  Memo	0.00  0.00		Subulog		4			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75329

October-20-11 2:57:09 PM

**\*75329\***

Page 4

Item ID: D2724-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: 206L Step Assembly  
 Start Date: 20/10/2011 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 02/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 <b>*180*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00				74 LH			
190 <b>*190*</b> HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				4X LH			
200 <b>*200*</b> Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum  Memo	0.00 0.00				4X LH			

W118439

START TIME: 1:20  
 OVEN TEMPERATURE: 320  
 FINISH TIME: 1:50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 75329

**\*75329\***

Page 5

October-20-11 2:57:09 PM

Item ID: D2724-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: 206L Step Assembly  
 Start Date: 20/10/2011 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 02/11/2011 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 <b>*210*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				N	15	11-11-10	
220 <b>*220*</b> HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <b>178988</b>  Memo	0.00  0.00				N	15	11-11-10	
230 <b>*230*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				4 h/h	1	11-11-10	counted & measured

**75329**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*75329\***

Page 6

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_      **Run**      **Start**      **\*NR1\***  
                          **QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_      **Stop**      **\*NR2\***

[illegible]

1141-15  
(4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

October-20-11 2:57:13 PM

Page 1  
2

Work Order ID: 75329

**\*75329\***

Parent Item: D2724-041

**\*D2724-041\***

Parent Item Name: 206L Step Assembly

Start Date: 20/10/2011

Required Date: 02/11/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:E As Per Ecn 766 06-01-06 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C		Manufactured	No			100	Each	108.1200	1	4			
<b>*D2622-120C*</b>									<b>**</b>				
Step Extrusion													

Location	Loc Qty	Loc Code
HALL	98.42	
64409	6	
68293	0.5	
<u>72131</u>	91.92	
WA	9.7	
46910	2	
66970	7.7	

*11.10.26*

*4*

D2734  
**\*D2734\***  
Step End Plate

Manufactured No 110 Each 68.0000 1 4

**\*\***

Location	Loc Qty	Loc Code
WA	68	
<u>73196</u>	8	
<u>73416</u>	60	

*11.10.26*

*3*

*1*

D3458-1  
**\*D3458-1\***  
Step Mounting Plate

Manufactured No 110 Each 9.0000 2 8

**\*\***

Location	Loc Qty	Loc Code
WA	8	
<u>71593</u>	8	
WA018	1	
63075	1	

*11.10.26*

*8*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

October-20-11 2:57:13 PM

Page 2

Work Order ID: 75329

**\*75329\***

Parent Item: D2724-041

**\*D2724-041\***

Parent Item Name: 206L Step Assembly

Start Date: 20/10/2011

Required Date: 02/11/2011

Start Qty: 4.00

Required Qty: 4.00

D3458-3

Manufactured No

110

Each

14.0000

2

8

**\*D3458-3\***

Step Mounting Plate

\*\*

*11-10-26*

Location

Loc Qty

Loc Code

WA

14

73327

14

D2734

Manufactured No

160

Each

68.0000

1

4

**\*D2734\***

Step End Plate

\*\*

*11-10-04*

Location

Loc Qty

Loc Code

WA

68

73196

8

73416

60

*4*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

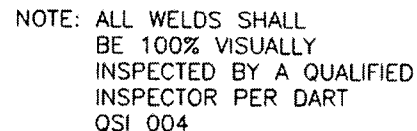
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC



APPLY BLACK  
ANTI-SKID ON  
- TOP SURFACE  
TO BOTTOM  
OF TOP RADIUS

- REFER TO STEP  
END DETAIL

D2724-1  
MAKE FROM EXTRUSION D2622-107

ROUND CORNER OF EXTRUSION TO  
MATCH BEND RADIUS OF END PLATE

SHOP COPY  
RETURN TO  
ENGINEERING

NO. 75329

11/10/20

11 J D2734 END PLATE

TYPICAL STEP END DETAIL  
NOT TO SCALE



**B**

- 1) MAKE FROM EXTRUSION D2622  
2) WELD PER DART QSI 004  
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4  
4) ALL DIMENSIONS ARE IN INCHES  
5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

**DART**

RELEASD

05-11-14

DESIGNED BY KE	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA		REV. C
CHECKED 	APPROVED 	DRAWING NO. D2724	SHEET 1 OF 1	
DATE 05.09.19		TITLE 206L/407 STEP ASSEMBLY		SCALE NTS
A.	97.12.04	NEW ISSUE		
B	98.10.19	UPDATED WELD DETAIL REVISED TOLERANCES		
C	05.09.19	RE-DESIGN, ADD D3458-1/-3		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries